Claims 14-27 are also rejected under 35 USC §112, first paragraph, because the specification is asserted to not reasonably enable the full scope of the claimed invention. The Office Action asserts that the description would not sufficiently indicate, which fragments and parts exhibit the cartilage and bone inducing activity of MP52. With the indication of the specific sequences in the above amendments, Applicants respectfully submit that this rejection is overcome.

The specific sequences can be found in the present specification, for example in the description of SEQ ID NO:1 on page 21. It is stated therein that that the mature MP52 can start in the range of positions 361-400, preferably at positions 381 or 382. This therefore provides support for the positions 361 to 400 to 501, 381 to 501 and 382 to 501 in part (a) of the claim.

Position "400 to 500" is the 7 cysteine region. The position of the 7 cysteines is also found in the description of SEQ ID NO: 1 on page 21. It is mentioned on page 8 that "the term" protein of the TGF-ß superfamily with cartilage inducing and/or bone inducing activity" denotes a protein which in its mature part contains the characteristic 7 conserved cysteines".

The entire sequence 1-501 is of course also contained in SEQ ID NO: 1, and the sequence 28 to 501 is where the signal peptide is split off. The expressed protein isolated for application on the TCP matrix of course no longer contains the signal peptide.

Present part (e) has been newly inserted and is an attempt to use a broader wording. Support for section (e) of claim 28 can be found in the specification, such as and for example on page 9, wherein it is stated: "Proteins are preferably included which have the same receptor mechanism and/or the same signal transmission as the members of the BMP and/or the GDF family, in particular MP52". Applicants have also attached hereto an article by Nishito et al., which was published before the priority date, and which describes experiments on the binding profile of GDF-5, which correspond to MP 52, to receptors.

For at least the above reasons, Applicants respectfully submit that claims 14-27 fully comply with 35 USC §112, first paragraph. Applicants respectfully request that these rejections be reconsidered and withdrawn.

The Office Action rejects claims 14-15 and 17-27 under 35 USC §103(a) as being obvious over Urist et al. (U.S. Patent No. 4,596,574) in view of Oppermann et al. (WO 91/05802) and Yan et al. (1995). The subject matter of claim 16 has been substantially incorporated into all of the claims. Thus, Applicants believe that this rejection has been rendered moot. For at least this reason, reconsideration and withdrawal of the rejection of claims 14-15 and 17-27 under 35 U.S.C. § 103(a) are respectfully requested.

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that

anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300.

Respectfully submitted,

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COPY OF AMENDED CLAIM MARKED-UP TO SHOW AMENDMENTS

17. (Amended) The implant material of claim 28 [14], wherein the bioactive matrix material is composed of a tricalcium phosphate ceramic comprising crystallographically phase-pure α- or β-tricalcium phosphate ceramic with an interconnecting microporosity of 20-60% of its volume.

21. (Amended) A process for the production of an implant material according to claim 28 [14], the process comprising applying the second component in and/or on the first component as a solution in a solvent such that a homogeneous distribution of the second component in and/or on the first component is achieved.

24. (Amended) A pharmaceutical composition comprising an implant material according to claim 28 [14], and a pharmaceutically and physiologically acceptable material.

25. (Amended) A method of treating a disease which affects cartilage and/or bone and/or damage to cartilage and/or bone in a patient in need thereof, the method comprising implanting an implant material according to claim 28 [14], into the patient.

26. (Amended) A method of use selected from the group consisting of a treatment of a bone defect, a sinus lift, a cyst filling in the jaw region, a bone facture, a bone replacement, an application in cosmetic and plastic surgery and immobilizing movable bone parts, in a patient in need thereof, the method comprising implanting an implant material according to claim 28 [14], into the patient.